AN INQUIRY

INTO THE KIND AND EXTENT OF

Education,

DEMANDED BY THE

ORDINARY CIRCUMSTANCES, DUTIES, AND WANTS OF LIFE:

BEING

AN ADDRESS

DELIVERED AT THE ORGANIZATION OF THE

Newtown Lyceum.

BY LEMUEL H. PARSONS,

PRINCIPAL OF BUCKS COUNTY ACADEMY.

DOYLESTOWN, PA:

KELLY & LARGE, PRINTERS.

1837.

NOTE.—The following Address was delivered so long ago, as August, 1835. It was not published at that time, for reasons which it is unnecessary to mention. The repeated solicitations of friends, and especially a formal request of the BUCKS COUNTY LYCEUM, have now induced the author to consent to its publication.

ADDRESS.

The occasion which calls for this address, is to me, and I doubt not, to all present, an interesting one. We have come together to commence a trial of the merits of an institution, which professes to aim at the promotion of the dearest, the best, the noblest interests of man;—an institution which proposes, for one of its objects, nothing less than the acquisition and diffusion of knowledge. If its pretensions are just, I need not say that it is entitled to the best wishes, and cordial support of this and every community.

The zeal and liberality manifested in bringing this Lyceum into existence, prove that *here* there is no occasion to vindicate the character and claims of the institution. I earnestly hope and trust, that both the expectations of my fellow citizens, in relation to the Lyceum, and the claims of the Lyceum upon our citizens, will be mutually and fully answered.

The professed object of this association being the acquisition and diffusion of useful knowledge; and its character and tendency being, as is supposed, already understood, and duly appreciated, I have thought that I could not better discharge the duty assigned me by the committee, of delivering an introductory address, than by making some general remarks on the kind and extent of *education* which we should acquire, the *character* we should sustain, and the *duties* which we owe.

By *education*, I do not now mean mere school learning. I mean to make the term nearly synonymous with *character*. I include all kinds of instruction and knowledge; and the art of drawing instruction from any and every source;—and all the habits of thinking and feeling and of action.

In pursuing this subject, I wish to dwell more particularly upon the art of using the means which Providence has placed in our way, so as to derive the greatest amount of instruction, and pleasure, and profit, from them. In doing this, I have in view more especially, the young. And I doubt not, that I shall be pardoned for addressing myself more particularly to that class.

No truth is more certain, or more obvious, than that all social and political order and happiness depend for their existence, upon the proper cultivation of the rising generation. Hence the youth of every country, and in every age of the world, have been looked upon by discerning minds, with deep and peculiar

interest. However inattentive, or indifferent, the great mass of the community may be to this class, no truly sagacious man, either good or bad, will be likely to be unmindful of them.—When Cataline undertook to subvert the liberties of ancient Rome, it is said he first set about corrupting; and bringing into his own views, the minds of the youth. So it is with all the master spirits who set in motion the wheels of revolution, either in the political, moral, or intellectual world. They never fail, so far as is in their power, of first aiming their influence at the young. And to gain them, is nothing less than securing the victory. Let the rising generation be once thoroughly initiated into any system, either of opinion or practice, and that system will as certainly prevail, as that the good or bad properties of a fountain, will be diffused through the stream that flows from it. If the young do not for the time, control by their influence, the customs and sentiments of manhood, and carry the work of reform into the ranks of age and experience, yet they will soon, very soon, reach that state themselves, and fill those ranks. Those who now possess the power, and wield the influence of society, must soon give way, with all their favorite customs, whether good or bad, to this class. New doctrines and sentiments propagated among the older classes of community, if they extend no farther, are of but little consequenee to the world,—for the plain reason that those who have imbibed them, are rapidly going out of it, and their sentiments and their practices must disappear with them.—Whereas the young are just going *into* the world. Their influence reaches back to the very fountains, and will flow down through the whole stream of life.

Another reason why those who wish to exert any kind of popular influence, are so eager to seize upon every opportunity of addressing the youth, is, their peculiar susceptibility of deep and lasting impresions of any kind. He who undertakes to inculcate principles or practices of any sort upon the young, has no deep rooted prejudices to encounter, and no strong habits of a contrary tendency to counteract. The mind is free to the influence of truth and reason; and unfortunately too, to falsehood and error. How responsible then the situation of those who are concerned (and who is not in some way concerned?) in forming the mind and character of the young! And on the other hand, how deeply interesting is the situation of those, who, like a body suspended in free space, receive motion and direction from the slightest impulses;—whose character and destiny are in a great measure under the control of circumstances, and mere casual influences!

Such being my views of the solemn and important situation of the young, I trust I shall not be censured if I use great plain-

ness in addressing them. Instead of laboring to amuse my audience a few minutes by a display of rhetorical elegance, or a flight of the imagination, (an ability for which by the way, I do not possess,) my only wish will be to drop some plain but useful hints, and so to impress them on the minds of my hearers, that they shall have a practical bearing on their conduct and character.

We inhabit a wonderful and most interesting world. Who can look abroad upon this vast globe of earth and rocks and water and air—of hills and vallies,—of trees and vegetables, and fruits and flowers,—of summer and winter, and day and night—of men and animals—and of life and death, without emotions of admiration and astonishment? It is indeed a wonderful world. Every thing about it, and upon it, is wonderful. There is not an object upon its face, animate or inanimate, which might not afford a theme of unceasing wonder to the loftiest mind in creation. There is a world of wonders in every individual of that countless race of beings to which we belong. But wonderful as we are, fearfully and wonderfully as we are made, we come into the world, utterly ignorant of the nature of every thing around us;—ignorant of ourselves, of our true interest, and the means of promoting it; ignorant of our origin, our duty and our destiny. We come into the world without the smallest degree of knowledge; and alas! how many go out of it almost as ignorant as they entered. Now every particle of knowledge we acquire, from whatever source—every impulse we receive, whether forward or backward, to the right or to the left, up or down; every habit we imbibe, whether of feeling, of thought or of action, constitutes a part of our EDUCATION—a part of our CHARACTER. And all the knowledge we acquire, all the impulses we receive, and all the habits we imbibe, will most assuredly have a bearing upon our happiness, and success, and usefulness in life. It is a well known and beautiful law of nature, that all the bodies in the universe, mutually attract and influence, and are attracted and influenced by each other. The sun attracts the earth, and the earth the sun. The falling stone, while it is drawn so forcibly towards the earth, draws by its own attraction, the earth towards itself. When I walk or run in a given direction upon the earth, I press the earth with an equal quantity of motion, in an opposite direction. The smallest body can and does exert an influence upon the largest. Not a body in our system, or in the universe, probably, is independent, or beyond the influence of any other body, however small, or remote. Not unlike the laws of gravity and motion in this respect, is *moral* influence. We are perpetually acting upon those around us, and being acted upon by them.

There is no computing the amount of influence, and moral and intellectual character, good or bad, which we have imparted, or received. How immensely important then, that we get within the sphere of such influences, as will tend to carry us forward, instead of backward, upward, instead of downward, and that will enable us in our turn, to exert a salutary influence, and only such upon those around us.

To a person just entering upon the stage of life, it must be interesting and certainly useful, to examine, and examine carefully, his relations to the world around him, and the influences to which he is subject; and enquire how he may best shield himself against those influences that would draw him the wrong way, or turn them to a good account, and how he may best improve the means at his command, in making provision for his safety, and for his future necessities, convenience and comfort.

Now what is the path which the young generally mark out for themselves, upon entering the great theatre of human action? What do they chiefly desire to obtain? If we could look into the hearts of all the youth who now hear me, what should we find to be their several objects of pursuit and of ambition? The general answer of course is, HAPPINESS. But how are they expecting to obtain it? Some probably in wealth; others perhaps in honor, or power, or in the enjoyment of friends; and possibly some—I hope many, by doing good—by making others happy. Now I do not say that either of these objects, is not a laudable one, or that the pursuit of it, is not calculated to promote the great object for which the world is striving, happiness. If you are making wealth an object of special pursuit, I would say go on, acquire wealth—only take care to pursue it an honest way, and use it well, when you have acquired it. Property is useful. It will procure for you many things which you need. It will assist you in the pursuit of other laudable objects. It will especially enable you to be useful to your fellow men. To those who are looking forward to the attainment of honor,—true honor, I mean, I would say you have chosen a noble pursuit. Who does not, or who should not desire to be regarded with favor by his fellow men? especially that favor which is secured by truly noble and praiseworthy actions? Seek honor then. But take care to deserve all you crave. Then, and then only, will honor bring happiness. So too, if you wish power and influence, take care to merit it, and you will probably obtain it; and when obtained, use it for the benefit of others, and it will be a valuable possession. If you propose to seek your own happiness by endeavoring to benefit your fellow creatures,—by trying to make others happy, it is scarcely possible that you should fail. You may, in all lawful ways, seek wealth, or honor, or influence,

subsidiary to, and as means of doing good, without scruple, and without fear that the acquisition will bring disappointment.

But here a most important question arises. How are the acquisitions themselves to be made? What *instruments* are necessary for accomplishing the various objects of human pursuit? The answer I would give most emphatically, and which I am sure every one present will respond to, is KNOWLEDGE—general and particular KNOWLEDGE. I have already said that we commence life, *entirely* destitute of knowledge. Now what one single object of life can be prosecuted with the least hope of success, without *some* knowledge? Does not every one have *to learn how* to do the most simple things? The very first necessaries of life cannot be procured without knowledge—knowledge that is acquired. How much more then, is requisite for supplying the demands of civilized and refined society!

It might be interesting to stop here, in view of the fact that we are sent into the world destitute of that knowledge which is indispensable to our comfort, and even to support life, as well as to any degree of success in the world, and draw the inference that Providence specially *designed* that the acquisition of knowledge should constitute a prominent and leading business of life: especially the *first* business. In support of such an argument, I might refer to the endless amount and variety of wonderful and useful truths, with which we are surrounded; but which are so far concealed from us, as to be unperceived, until we *study* and *learn* them; and to the faculties, and the means, and the facilities we possess *for* studying and learning those truths. But the point in hand now is, to show the absolute necessity and usefulness of knowledge.

As I have already said, *some* knowledge is indispensable in every department of human labor and pursuit. In many kinds of business, a considerable degree of *scientific* knowledge is almost indispensable, and in nearly all, a knowledge of *some* of the sciences, is of the utmost importance. In *any* branch of business, I am persuaded, a man would be better off with a good fund of scientific knowledge, than without it. Who can doubt but that the farmer who has a good knowledge of Chemistry and Botany, and perhaps Geology and Mineralogy, has greatly the advantage over one who is destitute of such knowledge? What class of mechanics or manufacturers is not benefitted by those, as well as the different branches of Natural Philosophy.

But an acquaintance with science, (which by the way is but another name for knowledge,) not only fits men for *particular kinds* of business, but qualifies them for business in general. It is a kind of capital which can always be advantageously vested. As a means of making money, if money making is to be the

object, it possesses a decided advantage over other sources of gain. To give an illustration, the substance of which I have somewhere read: An Irish emigrant, with his spade, can earn perhaps six or seven dollars per month on your canals. A young man having acquired a tolerable education, engages in teaching his neighbors' children, and receives three or four times that amount; while his work is less laborious, and employs fewer hours. The same individual perhaps, spends his winter evenings, in acquiring a knowledge of surveying, and during the summer season commands from two to three dollars a day. He may still go on and acquire a knowledge of Civil Engineering. and receive for the use of his knowledge or skill, as much in one day, as the workman on the canal receives for a month's labor. Innumerable illustrations might be given to the same effect.

It may be worth while to remark here, that there are three different ways of producing wealth or property:—manual labor, the employment of capital, either in money, or any kind of personal, or real property, and the employment of skill. And it is a well established principle in political economy, that *skill* is the most valuable and productive of the three.

I might go on and show the advantages of knowledge, in securing us against fraud and deception. And a most important advantage it is. For however humiliating the fact, it is nevertheless true, that society is full of these elements, and no man is safe who does not arm himself against their insidious approaches. A man needs to be well acquainted, not only with the nature and value of all kinds of property in which he may have occasion to deal, but with the nature and bearing and legal character of different business transactions and forms of written instruments; or he will be constantly exposed to be taken in by crafty, designing men. He needs moreover a thorough acquaintance with language, and the principles of reasoning and argumentation, to be able to assert and defend his rights—to detect sophistry, and expose deception and fraud. A considerable fund of knowledge is indispensable to secure even a tolerable degree of safety in this particular. And even a knowledge of the sciences, and of some of the higher branches of learning is often eminently useful. How often are men deceived into bad bargains, and drawn into ruinous engagements, frequently without comprehending their nature till too late, which a little more general information might have prevented. How often men are deceived and cheated by venders of various articles, particualrly manufactured ones, claiming to be new inventions, and wonderful improvements, when a slight scientific knowledge of the sub-

stances, or of mechanical laws, would have detected the fraud, and saved the individual from imposition.

I might enumerate many other practical advantages of knowledge; but probably much of what I have already said is uncalled for. I doubt not I am addressing many, who understand this part of the subject much better than myself.

I wish however to dwell a moment on one or two other views of the subject. And here too, I probably shall be able to say nothing that will be new to most of my hearers.

The first thing I shall allude to, is the tendency of all knowledge to promote individual happiness. Who is not conscious of having experienced sensations of pleasure, both in the acquisition and contemplation of *new truths*, which he has learned, and which have become parts of his knowledge? There is always a pleasure (as I believe some writer has said,) in learning what we did not know before; in knowing what others know. But this is not all. There is something in the very nature of knowledge,—all useful knowledge, that is calculated to awaken sensations of the purest pleasure. There is scarcely a single truth in the whole circle of science, which, when fully understood, can be contemplated without interest. And it is not merely a person here and there, of a "peculiar turn of mind,")to use a common expression) who is capable of being thus interested: but let *any* person become thoroughly acquainted with the truth, and the reasoning upon which it rests, and I venture to say he will be pleased. Innumerable instances might be mentioned, in which the bare contemplation of the truth itself would be a source of intense interest. But an acquaintance with the process of reasoning by which those truths are investigated, and their existence established, affords additional interest, and is of itself a most agreeable, as well as profitable exercise. Indeed without understanding the steps by which a proposition is demonstrated, we can hardly be said to *know* the truth itself.—What person ever became thoroughly acquainted with the nature of atmospheric air—the fluid which we are constantly breathing, without emotions of interest? nay, without being filled with astonishment? Let a man be shown in such a manner as to be rationally convinced that his own body constantly sustains a pressure of fourteen or fifteen tons, and he will not regard it is a matter devoid of interest. But this is only one among many, and perhaps the least interesting of all the phenomena, which so simple a thing as the atmosphere exhibits. It is a most interesting thought that we are immersed in a fluid which is as really a substance as the rocks and the solid earth and yet is perfectly invisible and impalpable; a fluid without which no vapor could rise from the ocean to descend again and water

the earth, or supply the streams: no birds could ascend from the earth; no sound could be heard, or produced; no combustion could take place, and no being could breathe.

The chemical properties of the atmosphere are no less wonderful than the mechanical. Who would imagine that this vital air, without which life could not be supported an instant, merely by varying the proportions of its constituent parts, may be converted into a fluid that will as instantly destroy life? Yet such is the fact. The very same ingredients which compose atmospheric air, constitute nitric acid or aqua fortis. And who again would imagine that one of the ingredients of the atmosphere, mixed with a certain other kind of air, or gas, should *burn* with greater violence than gunpowder; and still more, that when the compound is *burnt*, it produces water? Yet all this is precisely true.

There are many other wonderful things connected with the atmosphere; and there are wonderful things, as I have before remarked, all about us. Natural science abounds with phenomena and experiments calculated to inspire us with awe and admiration. And who can doubt, as I have before hinted, that Providence designed—*particularly designed*, that these wonders which he has scattered all around us in such abundance, while he has given us faculties for understanding and admiring them, should become objects of special study, and a source of pleasure, as well as of profit?

I might refer to innumerable instances, in almost every department of science, no less interesting, many of them perhaps more so, than those I have alluded to, respecting the atmosphere. The operations of all those great, though mysterious principles which seem to constitute the basis of all material existence—viz. gravity, light, heat, and electricity, must always furnish themes of overwhelming interest and wonder. And they lose none of their interest, when we reflect that human reason never has, and probably never will ascertain whether either of these principles is material or not. I dare say many of my hearers have witnessed the effect of gravity in causing the *tides*. And if they have looked at this mighty phenomenon in the light of philosophy, they have witnessed an interesting sight. No person, I am sure, ever stood on the shore of the mighty ocean and looked at the moon in the sky, and then at the water before him, and saw it gradually retiring from his feet, and from the shore, to obey the impulse of that little orb two hundred and forty thousand miles distant, putting forth no visible power,—without overwhelming and indescribable emotions. And how pleasing the thought that this earth grasps the moon, though so remote, with an invisible, but resistless force, which like a string to a

whirling stone, keeps it in its orbit; and that even our own bodies exert an influence on that distant planet. Every thing relating to gravity, and every thing relating to the vast system of worlds, of which our earth is one, is full of interest.

The common experiments in *Electricity*, I suppose are familiar to most, perhaps all present. And is it not interesting to see sparks of fire, or something like it, darting from our own bodies, or from a pail of water? and to know that those sparks are identical with the lightning of the clouds.

And how much less interesting are those common, but useful agents, light and heat? Though less imposing in their ordinary manifestations than electricity, they are in reality quite as astonishing. I cannot even allude to their properties. I may however be allowed to dwell a moment on light, in connexion with another wonderful object—the *eye*. Perhaps not a more instructive moral lesson can be drawn from any part of the creation, than from an examination of the mechanism and optical principles of the *eye*. I have no time, and it would be out of place to stop to describe it. How wonderful the arrangements of Providence in providing an ocean of light at the great central orb, the sun, and pouring forth floods of it to every quarter of the system, and then giving us eyes, precisely adapted to receive that light, and so constructed as to convey to the seat of sensation, an idea of surrounding objects. There is one thought connected with this subject which I do not recollect having seen dwelt upon, and which appears to me to add to its interest;—that two things, in themselves quite independent of each other—things which are not parts of the same *machine*, should be formed with such obvious reference to each other. The eye is indeed a wonderful organ, considered as a part of the body; and so are the ears, the mouth, the limbs. They all show design. But it does not seem to me so wonderful that different parts of the same body should be constructed with reference to each other, and to the convenience of the whole, as that there should be such a special reference and adaptation in the constitution of one body, to the laws and design of another, of which it is in itself independent. The same fact is observable in the structure of the *ear*, with reference to certain properties of the atmosphere, for the purpose of *hearing;* also in the little valves in the throat, which are made on purpose to act upon that same atmosphere, causing certain vibrations, so as to produce vocal sounds, and lay a foundation for the faculty of speech. Many other similar relations might be mentioned; and many other principles of science, and operations of nature, might be adduced illustrative of the proposition that knowledge tends to promote individual happiness: but I forbear.

There are one or two other advantages of knowledge, which I wish very briefly to allude to. The first is: Knowledge is the *best*, if not the chief source of *social* enjoyment. If it is a source of *individual* happiness, it is easy to see that it must be calculated to promote *social* enjoyment. We are social beings. Much of our happiness consists in social intercourse. The more extensive our knowledge, the more we shall have to talk about; and the less relish we shall have for low and frivolous amusements. Our social enjoyments will not only take a wider scope, but they will be more refined and substantial.

Knowledge is one of the firmest supports of morals. By opening sources of refined and innocent pleasure, it begets a disrelish for low, groveling pursuits, and vain and trifling amusements, and thus counteracts some of the most powerful tendencies to dissipation and vice.

I have already alluded to the advantages of knowledge in protecting us against imposition. But this is not the only danger which it is calculated to guard us against. It conduces to personal safety. The necessity of knowledge of particular kinds, is universally recognized, and every day acted upon, as a protection against danger. Who thinks of entrusting his health and his life in the hands of an ignorant quack? or who is willing to commit his rights to an ignorant, unskillful lawyer? Who would ever venture himself in a steam-boat, under the guidance of men known to be ignorant of their business? Most of the misfortunes and accidents of life result from ignorance, either in the individuals themselves, or in others. I might mention hundreds of instances of exposures to dangers, and the experience of accidents owing to ignorance; and as many more, where real danger growing out of necessary circumstances, may be lessened, or removed by the exercise of proper knowledge or skill.

Need I say that knowledge is the only safe-guard of our civil liberties? What would become of our boasted freedom —of our republican institutions, in the hands of an ignorant multitude? Nothing short of general intelligence, and a pretty high degree of intelligence, as the world is beginning to see, can ever ensure permanency to a republic. In a popular government, knowledge is emphatically *power*. The great danger in such a system as ours, is from within. If you load a popular government with an ignorant multitude, you obstruct the very veins and arteries of the system. Nay you destroy the very elements of republican existence. But knowledge is the most powerful defense from without. What gives *man* dominion over the brute creation? Is it physical strength? By no means. Place a man, or a hundred men, against a lion,

with no power but their physical strength, and what would become of them? And yet we should not fear all the lions in the world, as much as one Bonaparte. It is not physical force, which we either fear or respect. A nation of Goliah's could not trouble us, without intelligence.

Finally, knowledge enables us to be useful. This view has already, to a considerable extent, been anticipated. There is not a single dspartment of useful, honorable action, that can be named, for which we can possibly be qualified, without knowledge. If we cannot successfully promote *our own* interest, it would be absurd to suppose that we can be extensively useful to others. But what do facts prove? Who have blessed the world by their labors and their discoveries, the ignorant, or the wise? It may be true that in a very few instances, ignorant persons have blundered upon important discoveries. But such instances are exceedingly rare; and even were they more numerous, they would afford no argument in favor of ignorance. Without knowledge, we have no reason to expect much of that satisfaction which flows from the consciousness of doing good.

But one very important question still remains. I have shown, what indeed I suppose every one knew before, that knowledge is essential for accomplishing the various objects of human pursuit, especially to secure and promote the *ultimate* object—happiness. And I have remarked that all knowledge is acquired—that indispensable as it is, we have none of it to begin the world with. Full as the world is of useful truths, and valuable experience, they profit us little, till we come into possession of them ourselves. *How then shall the requisite knowledge be obtained?* This question, which I had intended should occupy more space than I now find myself at liberty to assign to it, opens a field of almost boundless extent. It involves many other questions, to answer either of which completely might fill a volume. Some of them are the following:—To what sources are we to look chiefly for instruction? How can we use to the best advantage, the means within our reach, of acquiring knowledge? What method of study is best fitted to enable us to apply to practice the knowledge we acquire? It may include also the question—what kinds of instruction and mental discipline do we most need? I shall dwell a moment on this last question first:—partly on account of its intrinsic importance, and partly to give definiteness to what I may say on the others.

As respects mental discipline, the object of all study is to learn to think closely, steadily, and long, and to reason closely, correctly and forcibly, on any given subject. The power and habit of close thinking and reasoning, I need scarcely say,

lie at the foundation of all useful and solid attainments;—of all intellectual, if not moral excellence. Then whatever calls into exercise and strengthens these, would be valuable, even if it had no other connexion with the business of life. Hence the importance of the higher branches of mathematics, and geometry.—But the mathematics *are* otherwise connected with the business of life. For the same reason, with others, the mixed sciences, such as mechanics, hydrostatics, optics, astronomy, &c. as well as chemistry, and other branches of natural history, are highly useful. But these studies have other claims to our attention, some of which, I have already alluded to. Most of them are closely connected with our every day business; and all of them calculated to exalt the mind, and improve the moral feelings. I would recommend to every one to make Natural Philosophy a prominent study.

To those to whom it is practicable, I would recommend an attention to moral, and intellectual philosophy—the one explaining our duty and the reasons of it, the other developing the laws and operations of the human mind. These, as well as natural philosophy, though generally regarded as above the ordinary range of study, are perfectly attainable by common minds, and appear to me altogether worthy the attention of all who wish to qualify themselves to act well their part on the stage of life.

We all of course wish to acquire that kind of education and character, which will enable us to exert an influence in the world. It is not physical force by which we expeet to compass our objects; nor is it a right to *command*, with a power of compelling obedience, that we need, or ought to desire. It is the power of *persuasion*. Every individual, from the highest to the lowest, needs this. Every one has daily occasion to use it. A moment's reflection, I think, will convince any one that much, if not most of the business of life, is laboring to persuade others to comply with our wishes, to respect our rights, or our interests, and to think and act as we do. To enable us to wield such a power, two things are necessary;—first—a knowledge of human nature, including an acquaintance with the operations of the human mind, and its susceptibility to motives: and second, the art of reasoning, and skill in presenting motives. The art of reasoning, or *ratiocination*, as it is technically called, is considered a distinct branch of science, and is called *Logic*.—The faculty of reasoning, depends very much for its cultivation and improvement, upon such disciplinary studies as I have named; and upon practice. I would however, by all means recommend a particular attention to Logic as a regular study.

There are two ways of operating upon the minds of men; writing and speaking. Each has its peculiar advantages, as

means of exerting influence. They both possess great advantage, as means of self-discipline. We should all do well to cultivate both. There is no danger indeed but that *speaking* will be *practiced* enough, if it is not cultivated. People generally are *talking* a great part of their time. And it is certainly a glorious privilege. It is by *talking* indeed, by *conversation*, that a large share of every man's influence, good or bad, is exerted. A common and useful method of cultivating the art of *speaking* (not the art of reasoning) is declamation—committing to memory and pronouncing orations, &c. A most valuable method of improving the reasoning powers, and of other faculties too, is *debate*. I have known some individuals improved to an almost incredible extent, in this way.

I have mentioned a few things which appear to me to be essential ingredients in a practical education. There are many others, of perhaps equal importance. I have omitted to dwell on the branches usually taught in our common schools, such as reading, writing, grammar, arithmetic and geography, taking it for granted that most, if not all of them are universally regarded as indispensable. If I had time, I would spend a moment in urging a thorough acquaintance with the English language, as being essential to the full and ready understanding of any other study: but I must pass over it entirely.

The question still recurs,—how shall a knowledge of all the proposed subjects, or of any important subjects, be obtained? From what sources, and in what manner, may we expect to derive the necessary instruction. The first direction I shall give is, to quote a common maxim, "Keep your eyes and ears open." I have often thought, when reflecting on the subject of education, and the complicated and cumbrous systems of instruction, so much in vogue, of an anecdote I once read. A celebrated physician is said to have announced to the world, that the results of all his experience would be found at his decease, contained in a particular manuscript. This paper of course became a matter of great public interest. After his death, it was brought forward, and according to his directions, exposed to sale, without being opened. The celebrity of its author, ensured for it an enormons sum. The purchaser congratulated himself, and was congratulated by his countrymen; and was applauded as a public benefactor, for his liberality in thus securing for his own country, the invaluable treasure. Being fairly in possession of the prize, he removed one after another, the splendid and massy envelopes, in which it was encased, till he came to the paper which contained the precious secret. He opened the paper, and found the whole comprised in these few words: "Keep the feet dry—the skin clean—the head cool—

the digestion regular,—and a fig for the doctors." I am persuaded that if the true system of communicating and receiving instruction could be brought to light, it would be found to consist, like this doctor's panacea, and like every true science, of but few simple principles. It will be perceived that in my remarks, I have reference to *acquiring*, more than *communicating* instruction. Indeed, it is laboring to acquire for one's self, that I wish particularly to recommend. The more one can be thrown upon his own resources, the better. This is a principle which should be recognized by every teacher. And knowledge that is obtained entirely *without* a teacher, provided it be completely obtained, is so much the better. It is that kind of knowledge, that is available for practical purposes.

But to return to the maxim, keep your eyes and ears open. We should learn to observe every thing going on around us, and search for the *reasons* of every thing. We should learn to trace effects to their causes. When we see the sun rise, or the moon wax and wane, or observe the wind blow, the rain descend, or water boil, we should desire, and endeavor to know the cause. It was by seeing an apple fall to the ground, as many of you know, that Sir Isaac Newton was led to the discovery of the sublime principle of gravitation, a discovery which would have immortalized his name, if he had never done any thing else for the cause of science.

We should be alive to every hint and every suggestion, from whatever source it may come. Every thing is full of instruction, if we will but receive it,and he acts unwisely, who refuses,or neglects to avail himself of any means of acquiring it, however small, or however humble. It is a grand mistake to suppose there are but few sources of knowledge worthy of our attention; or but few individuals competent to instruct us. We should put ourselves in the attitude of learners, and make every body, and every thing, our teacher. We may learn wisdom from the child, and the rustic, and even from the rocks and the trees, as well as from the sage and the philosopher.

There is one thing which I cannot urge with too much earnestness, as a prerequisite in all our researches,—*a sincere desire to ascertain the truth*. Whether we read or meditate, or listen to the instructions of others, or engage in disputation, *truth—light—instruction*, should be our object. Not that any naturally prefer error, or deception, to truth, as an object, either of acquisition, or of communication to others. Such a supposition would be preposterous. But there *is* danger of our predilections and prejudices, and the desire of victory, having such sway, as not only, greatly to obscure in our estimation, the value and beauty of truth, but to diminish our chances of finding it; and

at the same time, to multiply the sources of error, and increase the tendencies to impart and imbibe it;—in short, to hinder and mislead us in our pursuit of knowledge. Probably we have no conception of the extent to which our views are obstructed, and perverted, by prejudice, and obstinacy of opinion; or how little we really desire truth for its own sake, in comparison with our zeal in defense of our favorite opinions, or in attempting to vanquish an adversary. We observe this every day, in others, but are slow to discover it in ourselves. It is not difficult to perceive the mote that is in our brother's eye, while probably there is a beam in our own eye. Let us then, strive to divest ourselves of those motives and habits, which we condemn in others, and whose influence upon ourselves, we are ashamed to confess. And as we wish to shield ourselves against error, or put ourselves in the way of improvement, let the grand, paramount object of all our study and research, and of all our strife, be the TRUTH. Now what is our conduct?—what is the conduct of mankind in this particular? Do people generally *appear* to make truth their sole object? One would suppose indeed, that its attractions were sufficient to secure for it, universal regard. Who can help admiring the infinite beauty of pure, unadulterated, immaculate *truth?* It is the truth to which we are led, that gives to science its principal charms. And it is the love of truth, more than any thing else, that constitutes the love of knowledge, or of science. It is a delightful thought, that there is truth in the world, in every department of science and of human study.—Whether *we* have it or not, truth lies somewhere. And it becomes us to search for it, as for hid treasures. We should recollect that truth often exists, combined with error. But it is no less truth, and no less valuable as truth. How important then, that we should be able to discriminate truth from error; to separate the gold from the base metal.

But how shall we decide,—especially when truth and error appear in the same dress? In all mathematical investigations, and to some extent in the mixed sciences, we arrive by a regular course of reasoning, at positive demonstration—absolute certainty. But in all moral questions, the case is different. We must decide according to the balance of evidence. This is the province of reason, of which faculty I have before spoken. But reason itself needs regulating. It is a noble faculty, but we are liable to abuse it. As learners, it is of the utmost importance that our reason be kept in its proper sphere, without transcending its proper bounds. We greatly need some safe criterion by which to judge of the truth or falsity of propositions. As a general rule, we should take care to avoid extremes, both of credulity and skepticism. Both of them hinder our progress

in true knowledge. It will not do for us to disbelieve every thing that happens to disagree with our preconceived notions of things, either because it contradicts what we have heard from those in whom we have great confidence, or because we cannot fully understand how the things can be so. It ill becomes any one, especially one who professes to be a learner, pertinaciously to deny that the earth is round, because he cannot take into his view, its whole circumference, as he would that of an orange, or because he cannot see how people or things can be kept on the other side;—or to deny that it moves because he cannot see or feel it move,—or that the sun, or the planet Jupiter is immensely larger than the world which he inhabits, because to his vision it does not appear larger than a plate, or an apple;—*unless* he knows that he has sufficient data, and can sufficiently see through the whole matter to enable him to pronounce understandingly. When we meet with doctrines or sentiments new to us, or at war with what we had previously supposed to be truth, unless they bear upon their face, indubitable marks of ignorance, superstition, or falsehood, we should do well to suspend our judgment, till we have time and opportunity of examining and weighing their claims. On the other hand, we are not bound to believe that a total eclipse of the sun, or the appearance of a comet, is the harbinger of any public calamity; or that business commenced on Friday, is more likely to prove disastrous, than if commenced on any other day; or that the weather on a particular day of the week or month, affords an indication of the weather for the ensuing week or month; or that the *sign* being in the head, or heart, or feet, has any thing to do with the affairs of men,—even if half the world believed it, ever so sincerely;—unless there is other evidence besides mere tradition and popular belief. We should endeavor to "prove all things, and hold fast that which is good."

The spirit and feeling with which we prosecute our studies, or listen to the discussions of others, as has been already intimated, are of great importance in respect to our progress;—and no less so to our happiness, and the formation of character. If we wish to convince others, as well as draw right conclusions ourselves, one of the best weapons we can use, is *candor*. We must *appear* to desire truth ourselves, and to convey nothing else to others.

The question respecting methods of acquiring knowledge, is far, very far, from being exhausted. It presents many views that have not even been alluded to. But I must dismiss it.

From the few hints I have offered respecting the *kinds* of knowledge which we need, and the *manner* of acquiring it, I need scarcely remark, that I consider the *Lyceum system of*

instruction, in many of its features, eminently adapted to promote that kind of education and character which it behooves us to acquire. No other system, I am persuaded, can be made to bear with so much effect upon so many, of all classes, with so little expense and parade, as the Lyceum. Not that I would have the Lyceum *supersede* other systems, or other means of instruction,—or would undervalue the importance of a rigid and systematic course of personal study, in order to a high degree of scholarship, or of mental discipline,—or that I would by any means, lightly esteem those branches of learning which are not, or which if you please, cannot well be pursued in the Lyceum. No such thing, as I trust, will follow, when I ascribe superior capabilities and superior claims to the Lyceum.

And now my friends, in view of what has been said of our relations to society,—the necessity and uses of knowledge,—the kind of education we should possess, and the means of securing it, can there be any doubt in relation, either to our *duty* or our *interest?* Is it not as certain, as that we are accountable beings, that they both combine, in urging us to avail ourselves of every opportunity, and every possible means of acquiring knowledge,—of obtaining a thorough, practical, virtuous education;—and at the same time, to do all in our power, to encourage and aid others in the same pursuit? Look at the subject, as it relates to yourselves and your friends;—look at it as patriots—as republicans—as constituents of a popular government;—look at it as philanthropists—as lovers of your species—as members of the great human family:—look at it as rational beings;—look at it as CHRISTIANS;—and decide, each for himself, solemnly and deliberately, not merely what you *ought* to do, but what you *will* do. No one, I am sure, can thus look at the subject, with a determination thus to decide, without soon finding that he has no right to remain inactive, or indifferent.

In all I have said, I have done little more than to start questions, without answering them, or throwing much light upon them. If any of the hints I have dropped, should induce others to pursue the enquiries farther, or be in any way instrumental in assisting any of my youthful auditors in their pursuit of knowledge and happiness, my object will be answered, and my efforts amply repaid.